

WHAT IS CLAIMED IS:

1 1. A compound contents delivery method using a
2 plurality of contents servers to which a plurality of
3 contents are distributed to be stored in their contents
4 storage units, respectively, a management server for
5 managing delivery of contents to a portable terminal and
6 an intermediate apparatus for mediating supply of
7 contents from said plurality of contents servers to said
8 management server so that said plurality of contents
9 distributed to said plurality of contents servers are
10 partially fetched as contents portions to combine the
11 fetched contents portions according to time series for
12 delivering compound contents produced through the
13 combination thereof to said portable terminal, said
14 method comprising:

15 an instruction information production step of, in
16 said management server, producing instruction
17 information for the compound contents production on the
18 basis of a substance of said compound contents to be
19 produced;

20 a contents portion fetching instruction step of,
21 in said intermediate apparatus, instructing said
22 contents servers to fetch contents portions needed for
23 the compound contents production according to said
24 instruction information produced in said instruction
25 information production step;

26 a compound contents element acquisition step of,
27 in each of said contents servers, acquiring compound
28 contents element converted in encoding format for said
29 portable terminal in corresponding relation to said
30 contents portion which is an object of the fetching
31 instruction in said contents portion fetching
32 instruction step to return the acquired compound contents
33 element to said intermediate apparatus;

34 a production step of, in said intermediate apparatus,
35 combining said compound contents elements returned from
36 said contents servers according to time series on the
37 basis of instruction information from said management
38 server to produce compound contents oriented to said
39 portable terminal; and

40 a delivery step of, in said management server,
41 delivering said compound contents produced in said
42 production step to said portable terminal.

1 2. A compound contents delivery method according to
2 claim 1, wherein said management server is made to store
3 and manage said compound contents returned from said
4 intermediate apparatus in corresponding relation to said
5 instruction information in the past in a state associated
6 with said instruction information, and said method
7 further comprises:

8 an identity decision step of making a decision as
9 to the identity between said instruction information

10 produced in said instruction information production step
11 and said instruction information stored in said
12 management server; and

13 an in-management-server first control step of, when
14 the decision result in said identity decision step shows
15 the produced instruction information is identical with
16 said instruction information stored and managed in said
17 management server, using said compound contents stored
18 in a state associated with the stored instruction
19 information as said compound contents to be delivered
20 to said portable terminal in said delivery step and, when
21 the decision shows no identity therebetween,
22 transmitting the produced instruction information to
23 said intermediate apparatus.

1 3. A compound contents delivery method according to
2 claim 2, wherein a plurality of intermediate apparatuses
3 each identical with said intermediate apparatus are
4 provided, and in said identity decision step, a decision
5 is additionally made as to the degree of similarity between
6 the produced instruction information and said
7 instruction information stored in said management server,
8 and in said in-management-server first control step, when
9 a decision result in said identity decision step shows
10 that the produced instruction information is not
11 identical with said instruction information stored and
12 managed in said management server, the produced

13 instruction information is transmitted to said
14 intermediate apparatus to which compound contents
15 information is returned with respect to, of said
16 instruction information stored and managed in said
17 management server, said instruction information which
18 is decided to be most similar to the produced instruction
19 information.

1 4. A compound contents delivery method according to
2 claim 1, wherein a plurality of intermediate apparatuses
3 each identical with said intermediate apparatus are
4 provided, and in said management server, a processing
5 load monitoring step is implemented to monitor a
6 processing load in said converting unit and an
7 in-management-server second control step is provided to
8 transmit said instruction information produced in said
9 instruction information production step to said
10 converting unit having a smallest processing load on the
11 basis of a monitor result from said processing load
12 monitoring step.

1 5. A compound contents delivery method according to
2 claim 1, wherein, in said compound contents element
3 acquisition step, said intermediate apparatus stores and
4 manages said compound contents elements returned from
5 said contents server in the past, and said contents portion
6 fetching instruction step includes an

7 in-intermediate-unit duplication decision step of
8 obtaining information for specifying contents portion
9 needed for the compound contents production from said
10 instruction information and making a decision as to the
11 degree of duplication in substance between said contents
12 portion needed for the compound contents production and
13 said compound contents element stored and managed in said
14 intermediate apparatus; and
15 a fetching instruction execution step for giving
16 a fetching instruction to said contents server on the
17 basis of a decision result in said in-intermediate-unit
18 duplication decision step.

1 6. A compound contents delivery method according to
2 claim 5, wherein, in said fetching instruction execution
3 step, on the basis of the decision result in said
4 in-intermediate-unit duplication decision step, said
5 fetching instruction is not given to said contents server
6 with respect to a duplicate portion between a substance
7 of said contents portion needed for the compound contents
8 production and said compound contents element stored and
9 managed, and a compound contents element corresponding
10 to said duplicate portion is used in producing said
11 compound contents in said production step.

1 7. A compound contents delivery method according to
2 claim 5, wherein, in said fetching instruction execution

3 step, on the basis of the decision result in said
4 in-intermediate-unit duplication decision step, when the
5 substance of a portion of the contents portion needed
6 for the compound contents production is duplicate with
7 respect to said compound contents element stored and
8 managed, said fetching instruction on a contents portion
9 non-duplicate with respect to said compound contents
10 element is given to said contents server.

1 8. A compound contents delivery method according to
2 claim 1, wherein each of said contents servers stores
3 and manages said compound contents element returned in
4 said compound contents element acquisition step in the
5 past and said compound contents element acquisition step
6 includes:

7 an in-contents-server duplication decision step of
8 making a decision on the degree of the duplication in
9 substance between the contents portion which is an object
10 of said fetching instruction in said contents portion
11 fetching instruction step and said compound contents
12 element stored and managed in said contents server; and

13 a compound contents element reply step of, on the
14 basis of a decision result in said in-contents-server
15 duplication decision step, fetching said contents
16 portion, which is an object of said fetching instruction,
17 from said contents storage unit and making a conversion
18 into an encoding format for said portable terminal to

19 return it as a compound content element to said
20 intermediate apparatus.

1 9. A compound contents delivery method according to
2 claim 8, wherein, in said compound contents element reply
3 step, on the basis of the decision result in said
4 in-contents-server duplication decision step, of said
5 contents portion which is an object of said fetching
6 instruction in said contents portion fetching
7 instruction step, a portion duplicate in substance with
8 respect to said compound contents element stored and
9 managed is not fetched from said contents storage unit
10 while a compound contents element corresponding to the
11 substance duplicate portion is returned to said
12 intermediate apparatus.

1 10. A compound contents delivery method according to
2 claim 8, wherein, in said compound contents element reply
3 step, on the basis of the decision result in said
4 in-contents-server duplication decision step, of said
5 contents portion which is an object of said fetching
6 instruction in said contents portion fetching
7 instruction step, a portion non-duplicate in substance
8 with respect to said compound contents element stored
9 and managed is fetched from said contents storage unit
10 and, after a conversion is made into an encoding format
11 for said portable terminal, the non-duplicate portion

12 is returned as a compound contents element to said
13 intermediate apparatus.

1 11. A compound contents delivery method according to
2 claim 1, wherein, in said contents server, on the basis
3 of popularity, important event and the like, a contents
4 portion expected to be an object of said fetching
5 instruction in said contents portion fetching
6 instruction step is stored and managed as said compound
7 contents element in advance.

1 12. A compound contents delivery method according to
2 claim 1, wherein each of said contents distributed to
3 said plurality of contents servers includes data having
4 a time zone including voice data or motion picture data
5 and said contents portion is arranged through the use
6 of the voice or motion picture data partially extracted
7 from said time zone.

1 13. A compound contents delivery method according to
2 claim 12, wherein, in said contents portion fetching
3 instruction step in said intermediate apparatus, said
4 contents portion for the compound contents production
5 which is an object of said fetching instruction is
6 designated by designating information about a service
7 location on the internet having said contents portion,

8 a time zone of said contents portion, a media assortment
9 or an encoding condition after the encoding conversion.

1 14. A compound contents delivery system comprising a
2 plurality of contents servers to which a plurality of
3 contents are distributed to be stored in their contents
4 storage units, respectively, a management server for
5 managing delivery of contents to a portable terminal and
6 an intermediate apparatus for mediating supply of
7 contents from said plurality of contents servers to said
8 management server so that said plurality of contents
9 distributed to said plurality of contents servers are
10 partially fetched as contents portions to combine the
11 fetched contents portions according to time series for
12 delivering compound contents produced through the
13 combination thereof from said management server to said
14 portable terminal,

15 said management server including:

16 a compound contents acquisition unit for
17 acquiring said compound contents on the basis of
18 instruction information for production of said compound
19 contents which is produced on the basis of a substance
20 of said compound contents to be produced; and

21 a delivery unit for delivering said compound
22 contents acquired by said compound contents acquisition
23 unit to said portable terminal, and

24 said intermediate apparatus including:

25 a contents portion fetching instruction unit
26 for instructing said contents servers to fetch contents
27 portions needed for the compound contents production when
28 receiving a request for the compound contents production
29 and said instruction information from said compound
30 contents acquisition unit;

31 a production unit for combining compound
32 contents elements returned from said contents servers
33 according to time series on the basis of said instruction
34 information from said management server to produce
35 compound contents oriented to said portable terminal;

36 a compound contents outputting unit for
37 outputting said compound contents produced in said
38 production unit to said compound contents acquisition
39 unit of said management server, and

40 said each of said contents servers including:

41 a compound contents element acquisition unit
42 for acquiring a compound contents element, in which an
43 encoding format is converted for said portable terminal,
44 corresponding to said content portion which is an object
45 of said fetching instruction in said contents portion
46 fetching instruction unit to return the acquired compound
47 contents element to said intermediate apparatus.

1 15. A compound contents delivery system according to
2 claim 14, wherein said management server includes an
3 in-management-server storage management unit for storing

4 and managing compound contents returned from said
5 intermediate apparatus in corresponding relation to said
6 instruction information in a state where said compound
7 contents are associated with said instruction
8 information.

1 16. A compound contents delivery system according to
2 claim 14, wherein said intermediate apparatus includes
3 an in-intermediate-apparatus storage management unit for
4 storing and managing said compound contents element
5 returned from said contents server through the use of
6 said compound contents element acquisition unit.

1 17. A compound contents delivery system according to
2 claim 14, wherein each of said contents servers includes
3 a storage management unit for storing and managing a
4 compound content element from said compound contents
5 element acquisition unit.